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NETWORK A MEETING RECORD

Network A Plenary Meeting
October 25-26, 2001, Budapest, Hungary

Participants

Wendy Whitham, Australia
Friedrick Plank, Austria
Christiane Blondin, Belgium (Fr.)
Luc Van de Poele, Belgium (Fl.)
Jerry Mussio, Canada
Jørn Skovsgaard, Denmark
Thierry Rocher, France
Jochen Schweitzer, Germany
Benedek Péter Tóta, Hungary
Gerry Shiel, Ireland
Fernando Cordova, Mexico
Jules Peschar, Netherlands
Arnold Spee, Netherlands
Eva Schøyen, Norway
Anne-Berit Kavli, Norway
Glória Ramalho, Portugal
Anita Wester, Sweden
Erich Ramseier, Switzerland
Andreas Schleicher, OECD Secretariat
Jay Moskowitz, Network A Secretariat
Maria Stephens, Network A Secretariat
Rich Tobin, Network A Secretariat

Presenters and Observers

Müfide Caliskan, Turkey
Ryo Watanabe, Japan
Martin Ripley, Qualifications and Curriculum Authority (England)
Andrea Kárpáti, Eötvös Lórand University
Joachim Wirth, Max Planck Institute

Regrets

Jana Straková, Czech Republic
Pirjo Linnakylä, Finland
Gella Varnava-Skoura, Greece
Chiara Croce, Italy
Kooghyang Ro, Korea
Jean-Paul Reeff, Luxembourg
Lynne Whitney, New Zealand
Guillermo Gil, Spain
Lorna Bertrand, United Kingdom

Summary of Major Outcomes

- The Network A Secretariat will make the suggested changes and corrections to the draft indicators for EAG 2002 and circulate them to members after the public release of the data in December. If members have comments on the proposal for EAG indicators for future years, they should send them to the Secretariat [by December 15].
- The Network A and C Chairs will meet on October 31st. Following that meeting, the Network A Secretariat will circulate a terms of reference for a task force on teaching so that members can consider joining such a committee. Also, if possible, there will be a presentation on the TIMSS-R Video Study at the next Network meeting.
- The Network A Secretariat will clarify what revisions are necessary to the proposal for the volume of Network A 2000 chapters and, if it does not require substantial work of the individual authors, will submit a revised proposal for commercial publication. The Network A Secretariat will let members know if a revised proposal can be submitted and, if so, what the outcome is, before the next meeting.

- Led by Arnold Spee, a committee of Network members (including Jerry Mussio, Luc Van de Poele, and Erich Ramseier) will draft a definition of "ICT literacy" for discussion at the next meeting so that development work may follow for a pilot assessment in 2006.
- The Network made several recommendations regarding the future of PISA to the Board of Participating Countries, including:
  - Beginning work on the *science literacy framework* in 2002;
  - Pilot-testing *computer-administered assessment* in 2006;
  - Convening a 3-person panel to *evaluate the mathematics framework* (nominations should be sent to the [OECD] Secretariat along with an indication of whether the expert is a math education person or a mathematician [by November 25]);
  - Re-energizing the *evaluation process* and including information on the impacts of PISA, including possibly a symposium to broadly disseminate results and to share experiences; and
  - Requesting that the consortium develop a scope of work and cost proposal for *reading in a foreign language* as an international option in 2006, which BPC members will discuss at the March 2002 meeting and determine whether or not the option should be included in the TOR for 2006.

Welcome and Introduction

Eugene Owen opened the Network A meeting and welcomed new faces, Anne-Berit Kavli from Norway and Müfide Caliskan from Turkey, as well as Martin Ripley from England, who was to make a presentation on World Class Tests. He also offered regrets from the Czech Republic, Finland, Greece, Italy, Korea, Luxembourg, New Zealand, Spain, and the United Kingdom.

Then, he turned the floor to Mr. László Környei, the Deputy State Secretary for Public Education, to give an official welcome. Mr. Környei welcomed members to Budapest and described Hungary's participation in OECD/INES initiatives and noted the importance of international cooperation in endeavors such as INES and also, more broadly, in finding solutions to world problems.

Finally, Benedek Péter Tóta offered his welcome and provided members with information about the meeting's hospitality.

Updates from the OECD

Andreas Schleicher provided updates on the status and progress of various OECD activities. However, rather than discussing INES activities by structure (i.e., by Networks) as he did in the past, he introduced members to a new thematic framework for thinking about INES activities. The new framework was developed to overcome limitations in the old model, which identifies inputs, processes, and outputs but which does not account for different levels of the education system and the interaction of inputs, processes, and outputs at these levels.

Thus, the two main dimensions of the draft framework are the *levels* of the education system (i.e., the first column below) and the *policy aspects* (i.e., the first row below). The four levels and three aspects come together in a matrix of cells, each of which can be used to address a variety of different policy questions.

	Outputs and outcomes of education and learning	Policy levers and contexts	Antecedents and constraints
Education system as a whole	1 (NWA, PISA, NWB)	5 (NWA, PISA)	9 (NWA, PISA)
Education service providers	2 (NWA, PISA)	6 (NWA, PISA, NWC)	10 (NWC)
Instructional settings	3 (NWA, PISA)	7 (NWC)	11 (NWC)
Individual participants in education and learning	4 (NWA, PISA, NWB)	8 (NWB, NWC)	12 (NWC)

Andreas then described how INES and OECD work was currently addressing each of the cells. He indicated that the exercise of mapping current work to the cells could help identify gaps in the current work.

1. Cell 1 includes work that examines outcomes at the national level: DeSeCo, Network A's work on competencies, PISA's outcomes data, and Network B's work on educational attainment/earnings/employment. In the future, information on adult skills would fit in this cell.
2. Cells 2 and 3 include work that examines outputs and outcomes at the level of the education service providers (schools) and instructional settings (classrooms): information on between-school variation and classroom and school climate from PISA and school drop-out rates and quality of learning environments from Network C.
3. See previous.
4. Cell 4 includes information on the outcomes of individuals: access and participation in education over the lifetime, graduate output, degrees, qualifications, and ISCED levels, for example, from the Technical Group and information on returns to education from Network B.
5. Cell 5 includes information on the policy levers and contexts at the national level: PISA data on time on task, engagement and attitudes, attendance, use of school resources, and outside school learning.
6. Cells 6 and 7 include information on the policy levers and contexts at the institutional and instructional setting levels: course offerings and distribution of decision-making from Network C and PISA, teacher quality from Network C and the Technical Group, and school resources, school support for transitions, and the use of ICT from Network C.
7. See previous.

8. Cell 8 includes information on the policy levers and contexts at the individual level: education levels, destination, orientation, duration of educational programs, human and financial resources, educational personnel, teacher training and compensation from Network C and the Technical Group.
9. Cell 9 includes information on the antecedents and constraints at the national level: home background, parental aspirations, educational resources at home, for example, from PISA.
10. Cells 10 and 11 include information on the antecedents and constraints at the institutional and instructional setting levels: learning environment, resources, SES intake of schools, and instructional time from PISA and Network C.
11. See previous.
12. Cell 12 includes information on the antecedents and constraints at the individual level: demography, public spending, decision making structures, and educational attainment.

Then, there was a brief period for Q&A before Andreas completed his presentation. Eugene asked about the placement of one of the topics (instructional time). Andreas noted that, depending on the level at which decisions are made in a country, certain topics could be considered a policy lever at one level and a constraint or antecedent at another. Eugene stressed that the framework should take into account those differences across countries. Fritz Plank reminded members that PISA only provides outcomes at the secondary level and that INES does not say anything about outcomes at the primary level (which would be a "constraint" on secondary outcomes) or tertiary levels.

Jochen Schweitzer expressed his appreciation for the framework but noted that it would be useful to include an indication of the weight of the different factors. He also noted that information on the independent learning of teachers, teacher competencies (versus their qualifications), and feedback and evaluation systems at the student and teachers levels was missing. He stressed that cooperation among Networks is very important since many of the cells are interdependent. Arnold Spee noted that the mapping showed that INES was very strong on what works but that more could be done to describe how or why it works. [The draft background paper on the framework is attached.]

Following the questions, Andreas described the current products of interest, including printed documents:

- Education at a Glance and a new Executive Summary document, which is planned for the future;
- Education Policy Analysis;
- The annual World Education Indicators (WEI) report with UNESCO, the theme of which this year will be education and the economy; and
- Other individual reports, such as the ISCED 97 manual, PISA publications, and the UOE manual;

and electronic documents:

- CD-ROM/on-line database for EAG;
- A pilot test in December of putting the PISA international datafile on-line; and
- Other publications on the INES website.

Jerry Mussio endorsed the move to utilize the web for dissemination publications and products and, on a different note, asked Andreas if the Strategic Management Group (SMG) had discussed the framework. Andreas noted that the SMG had reviewed a draft, were generally supportive, and were going to ask the National Coordinators to consider it in more detail. Concerning the on-line database, Jules Peschar noted that thematic report authors should not be under stricter guidelines than the general public, once the data were made available in December. Arnold asked about what impact the General Assembly had had on INES work so far. Andreas noted that, with the decision at the General Assembly that any new activity must be costed out and agreed upon by the Education Committee, there were lots of activities in the pipeline but that the process was moving slowly.

Presentation on World Class Tests

In the later morning session, Martin Ripley, from the Qualifications and Curriculum Authority (QCA) in England, gave a presentation on the World Class Arena. First, he described QCA as the division that is responsible for anything "new," which so far has included adult literacy and numeracy assessments, ICT statutory tests, and diagnostic profiles of children entering school. The World Class Arena also falls under this category.

The World Class Arena is a project aimed at identifying gifted and talented students (e.g., the upper 10 percent of students), improving mathematics and problem solving, maximizing the use of ICT, developing materials to support teachers and teaching of gifted and talented students, and promoting international exchange on this topic. The World Class Tests, one component of the program, focus on mathematics and problem solving in mathematics, science, and design technology and are given on a voluntary basis to 9- and 13-year-olds. The tests have both paper and computer-based components and seek to present students with non-routine and unfamiliar mathematics and problem solving tasks. With the tests, there is an expectation that gifted students will "learn while doing." Notably, with the computer-based option, students are given maximum control over the test-taking experience and can move freely between tasks at their own initiative.

Some of the lessons learned from the tests are: children like the tests; children find them difficult; there are gender issues (with boys being over-represented at both extremes); children are not systematic in their approaches to problem solving; teachers need materials to help them teach to these students; and there is international interest in the project.

Members were very appreciative of the thoughtful presentation. Jay Moskowitz asked how the results on the World Class Tests were correlated to IQ tests, or general intelligence. Martin noted that they were highly correlated but the World Class tests allows teachers to identify the type of tasks that are useful for this group of students and he noted that, for inner city children, these tests could be a useful alternative way to identify gifted children. Fritz asked if the tests

and the program were restricted to the English language. Martin noted that, at this point, the core participants (including some other countries in which the tests were being field tested) were all English speaking. Jochen asked about the characteristics of these students and was referred to the recently released publication on the project and the website (www.worldclassarena.org).

Discussion on EAG Indicators 2002

The Network then turned to a discussion on EAG 2002. Maria Stephens gave an overview of the indicators for EAG 2002. She noted that the draft indicators for EAG 2002 reflected members' decision at the last meeting in Brussels to focus on the key results from PISA and preview the thematic report on Social Background. The five indicators included in the chapter are: students' reading literacy, with information on proficiency levels, means, and distribution; three indicators analyzing student's reading literacy in terms of key background variables such as material and cultural resources, mother's level of education, and students' and parents' place of birth and language; and finally, students' mathematics and scientific literacy. She noted that the current draft included more indicators than in the original proposal because, in a review of the original proposal over the summer, members indicated their desire to include as much information from PISA as possible. Maria also noted that the indicators, although modified for EAG, drew heavily from the international report in order to maintain consistency.

Network members then had an opportunity to provide comments on the indicators. Arnold made the first comment, questioning why this draft was applying stricter standards for "below-the-line" countries than in previous editions of EAG. Eugene noted that this edition of EAG aimed to follow the BPC's guidelines regarding the treatment of Netherlands data. Jerry pointed out that previous editions of EAG had followed the standards of the given international study and thus the logic of this year's chapter following BPC protocol was actually not inconsistent with strategies from previous EAGs. Andreas also noted that the discussion was moot because no mean could reliably be calculated for the Netherlands. While not dissenting from those points, Erich Ramseier pointed out that their current treatment in the chapter was somewhat inconsistent within the chapter and that it could be made more clear in the footnotes and text the types of comparisons that were acceptable to make for the Netherlands.

Following that discussion, members made the following suggestions:

- *Text*. The footnotes on the Netherlands should be changed to better describe the different treatment of means versus sub-group means and the limits of cross-country comparisons. The reference to Belgium in the 4th paragraph of page 15 should be deleted.
- *Figures*. The ordering of countries in the figures (e.g., F1.3, F5.3 and F5.4) should be checked. Figures F2.1 and F2.2 should use drop bars instead of colored bars and labeling should be reconsidered. The figures for indicators F2-F4 should present data on frequencies and data on achievement in a consistent order across the indicators. Figure F3.1 should be ordered by the differences that are focused on in the text, namely those between students whose mothers completed secondary education and those whose mothers did not. The title of Figure F4.1 should refer to "immigrants" rather than "non-immigrants."

- *Tables*. An explanation will be added for the information in the final column on "increased likelihood" in Figure F2.1. The final column in Figure F2.2 will be deleted.

More broadly, Luc Van de Poele pointed out that the face validity of the data on mother's education was questionable (at least for Belgium) and, given that similar data from other sources are presented in other chapters of EAG, it would be wise to check the two against each other. Andreas assured Luc that such an analysis had been done and the match was actually quite close, but it was suggested that a note be added about this. Fritz and Jochen both expressed some concern about the reliance on bivariate analyses in Indicators F2 through F4.

The Network A Secretariat agreed to make the suggested changes and to circulate a revised draft to members after the data are publicly released on December 4, 2001. Eugene also asked members to provide any comments on the EAG 3-Year Plan in writing to the Secretariat [by December 15].

Update on Related Activities

Eugene then gave a very brief update on related activities including PIRLS and DeSeCo. Regarding PIRLS, he noted its links (in framework) to PISA and the ALL study. He also reminded members that PIRLS would give a 10-year trend line for 9-year-olds in those countries which participated in both the 1991 IEA Reading Literacy Study and PIRLS 2001. Regarding DeSeCo, he called members attention to the 2nd international symposium, which will be held in February 2002, and suggested that Network A may wish to use the findings of DeSeCo to inform its development work in future CCCs.

Discussion about a Task Force on Teaching

To end the first day of the meeting, Jay Moskowitz updated members on the recent Network C meeting and the possibility of a joint Network A and C effort to develop information on teaching. He noted that Network C had a sub-group on teachers, which was recently dissolved, with the idea that the group would be reconstituted with joint membership from Network A and a focus on *teaching* instead of *teachers*. Up until this point, the subgroup had focused on traditional information such as qualifications and supply and demand, whereas a new committee (or task force) would focus on broader issues of quality such as pre-service education, professional development, and instructional practice, as well. Jay noted that the questions before Network A are: (1) are members interested in participating in this task force; (2) how should it work (e.g., alternatives to face-to-face meetings?); (3) what should the scope of work include; and (4) how can it be funded? He said that members should think of the task force as a long-term development activity and should not tie it too closely to PISA—i.e., the products of the task force would be outcomes unto themselves and would be an INES, not a PISA, activity.

Arnold asked if it was necessary that this initiative regarding teaching be cross-national. Jay remarked that, while teacher supply and demand issues are generally local, other issues may not be. Therefore, one criteria the task force could use in determining its priorities is whether or not there would be value-added in collecting information as part of an international activity. Several

other members asked questions and there was a lively discussion. In sum, some of the points for the task force to keep in mind were: that it might be more useful to look at the issue from the perspective of learning (i.e., ensuring learning is the primary job of a teacher, not teaching *per se*); how to relate teaching to outcomes and account for the varied contexts for teaching; and how to draw from advances in ethnographic and video research.

Although a few members were interested in serving on such a task force, most were hesitant to commit to doing so without a better idea of the preliminary scope of work and timeline. Eugene said that he would be meeting with Jaap Scheerens on October 31st to discuss a terms of reference. The Secretariat will distribute the terms of reference to members so that they can consider if they would like participate in the task force.

ICT Presentations

The second day of the meeting began with presentations from ICT experts.

Andrea Kárpáti

The first presentation was from Andrea Kárpáti from Eötvös Lórand University in Budapest. Andrea described experiences in assessing ICT competence in Hungarian schools. First, she gave an overview of some of the challenges for using and assessing ICT in Hungary, including the location of computers within schools (e.g., in labs instead of classrooms); lack of digital teaching aids across subjects and age groups; lack of suitable software and equipment for students with special needs; and teachers who are under-confident and under-trained for using technology. Then, she described Hungarian experiences with the ICT and Quality of Learning Project of OECD. This project included impact studies in schools with "exemplary use" of technology and quasi-experimental studies of ICT-enriched curricula, student surveys, and the development of on-line databases to support teaching with technology.

She also described the EMILE project, which aims to observe and describe the solutions applied for integrating ICT in primary and secondary education in different regions of Europe. She noted that the approach to the EMILE project was intercultural and the study relied heavily on case studies to answer its wide-ranging questions, such as how does external pressure influence the use of ICT in schools, or how is ICT used in schools, or is ICT an agent of change for teaching or school culture? Finally, she identified important questions related to ICT, including those on: skills and abilities (background factors, gender gap, increasing use and access), working habits with ICT, and use of ICT in free time and hobbies. In closing, she noted that the most acceptable form of ICT assessment for teachers was computer-based assessment and described a new assessment software called Movelex.

[For more information, refer to the copy of her presentation, attached.]

Joachim Wirth

The second presentation was from Joachim Wirth from the Max Planck Institute for Human Development in Berlin. Joachim described how technology was used to deliver part of the

German option for problem solving in PISA and how technology enabled the development of new types of indicators, on students' strategies or thought processes. In the German problem solving assessment, two problem solving constructs were established: analytic and dynamic. For the latter, interactive situations were required and 3 assessment activities were developed from psychological paradigms for delivery via laptop computers. Two of the activities were in the final study: one in which students worked within well-defined rules to solve a problem (i.e., African farm example) and one in which students explored a novel situation and answered questions related to it (i.e., space buggy example). With the space buggy task, the developers became less interested in how students answered the questions at the end and more interested in how students used their time to explore the simulated scenario. Process indicators were developed that showed if students were, at one extreme, trying different tactics in a completely random manner, or, at the other extremely, efficiently learning and testing their theories about how the space ship and buggy moved.

In the space buggy scenario, the developers learned that students' ICT skills should be regarded as domain-specific knowledge rather than as a biasing effect. Although there was a small gender bias in favor of boys, it was explained not by higher ICT skills or interests among boys but by their greater frequency of playing specific strategic computer games. In sum, the test developers found it feasible to use laptops to deliver assessment and, in doing so, developed new indicators describing students' learning processes.

Update on PISA

Andreas then gave a brief update on PISA, focusing on data development, analysis and dissemination, and technical review. Andreas noted the following products from PISA, including: the initial report, a data-oriented report, thematic reports, a technical report, and other ongoing dissemination mechanisms, such as the PISA newsletter. Some members then asked clarifying questions. However, some of the questions members raised (e.g., relating to reconstituting the external evaluation team or seeking new mechanisms for developing the context questionnaires) were tabled for the late afternoon discussion on the future of PISA.

Network A Chapters

Maria then updated members on the status of the endeavor to have the Network A 2000 chapters published. Over the summer, the Secretariat prepared and sent book proposals to 8 academic publishing companies (mostly in Europe) to solicit interest in the volume initially prepared for the General Assembly. Most of the companies responded quickly that they were not interested, either because the volume did not fit well in their program of work or their program of work was full for the year. The Secretariat did receive an initial favorable response from Kluwer Academic Publishing in the Netherlands indicating that the proposal and sample chapters were sent for external review. However, it was just learned that the proposal did not receive a favorable review (due, in part, to skepticism about why the book was not published by OECD) and the Network was asked to re-submit the proposal. In closing, Maria asked members to comment on whether or not, given recent developments, members wanted to continue with this pursuit and to what extent their answer depended on the extent of the revisions that would be necessary—which will be clarified as soon as possible. Eugene added that some of the chapter

authors, if the book could not be published, were interested in turning their chapters into journal articles.

Gerry Shiel and other members including Fritz and Anita Wester voiced strong support for re-submitting the proposal if the required revisions were not prohibitively extensive. No members dissented from this general feeling, although Jules, one of the chapter authors, did point out that the chapters were at risk of becoming too dated and suggested that this be the final attempt to have the chapters published together. The Network A Secretariat agreed to clarify the extent of the revisions that would be necessary to re-submit a successful proposal; communicate those findings to the Network; and, should the revisions not require extensive reworking by the individual chapter authors, re-submit the proposal and communicate with the Network the final determination in advance of the next meeting.

Future of PISA

The final topic on the agenda was to discuss a variety of issues relating to PISA. Eugene laid out the issues, which were then discussed in turn: issues relating to 2006, including the science framework, computer-based assessment, context questionnaires development, and ICT assessment development; issues regarding the evaluation of PISA; design issues (i.e., options); and data issues (i.e., training for use of PISA data, symposium). For most topics, Eugene proposed a recommendation from the Network to the BPC, the recommendation was discussed and a decision was taken. In summary:

- The Network agreed to recommend to the BPC that development of the science framework for major domain status in 2006 should begin in 2002. In doing so, members noted the following concerns: that the framework should take into account the policy concerns that are specific to science and that differ from those for mathematics; that item development should focus on reducing the reading load in some of the items; that the framework should maintain the broad notion of literacy, which is especially important for those countries in which science is not mandatory for 15 year-olds; and finally, that the framework should stress what is both innovative and policy-relevant given different approaches in different countries. If the BPC takes the recommendation, Network A would be involved in suggesting an approach for the work.
- The Network agreed to recommend to the BPC that the TOR for 2006 should pursue pilot-testing computer-based administration in 2006. It was noted that members should be prepared to identify and share national examples of how cultural/linguistic issues in computer-based tests are dealt with. Network A will be responsible for developing the 2006 TOR.
- The Network agreed to develop a definition of ICT literacy for the next meeting, which would enable mandating a small group to plan development work for (at least) a pilot assessment of ICT literacy in 2006. Arnold agreed to take the lead on developing the definition, with assistance from Luc, Jerry, and Erich.
- The Network discussed the context questionnaires. Members suggested that future development efforts should take advantage of information from the evaluation process,

develop criteria for decision making, and maximize relevant linkages between the school and student questionnaires.

- The Network agreed to recommend to the BPC to re-energize and expand the evaluation process to include: (i) an evaluation of the 2003 mathematics framework and (2) an evaluation, in multiple waves, of the reception and utilization of information from PISA. The purpose of the evaluation of the mathematics is not to critique it in detail (which is not feasible given it is in the item development phase), but rather to gain an external validation of the framework as early as possible given its somewhat particular viewpoint and orientation. Network members should send their nominations of experts to serve on an evaluation panel to the [OECD] Secretariat. When making nominations, members should indicate whether the individual is an expert from the education side or from the skill-demand side (e.g., a mathematics educator or a mathematician). Members also should send nominations for the general evaluation of PISA.
- The Network agreed to recommend to the BPC that assessment of reading in a foreign language should be revisited for 2006. The Network recommends that the OECD Secretariat should have the Consortium prepare a revised scope of work and cost proposal for such an assessment, which could be discussed by BPC members. Then, a decision could be taken at the March 2002 BPC meeting on whether or not it should be included as in international option in the 2006 TOR. Regarding other options, members noted that it would be useful to have a mechanism for countries participating in the classroom option to share their results.
- The Network recommended that the BPC consider (at a future meeting) whether or not to organize training sessions for the use of PISA data and also that they consider a symposium on the results of PISA, in order to broadly disseminate the findings. Regarding the symposium, members were supportive of the idea but stressed that much thought would have to be given to the audience, the specific goals, the format and organization, etc.

[See also updates in cover letter.]

Eugene suggested that longer-term issues relating to the overall data strategy be tabled for a future meeting and asked members to keep them on the radar screen.

Next Steps and Closing

In conclusion, Eugene reviewed the major decisions taken at the meeting (a summary of which can be found at the beginning of this document). It was suggested that the Network A meeting be held at the end of April, separate from the BPC meeting which is to be held in March. Both locations are to be determined. [See updates in cover letter.]
Eugene thanked Benedek for his hospitality and warm welcome in Budapest; Martin Ripley, Andrea Kárpáti and Joachim Wirth for their presentations; and the members for their hard work and participation, as always. The meeting was adjourned.